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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/620,523	07/20/2000	Bruce E. Novich	1596C5	2899	
7590	03/24/2005		EXAMINER		
Mark D. Sweet, Esq. Finngan, Henderson, Farabow, Garrett & Dunner, L.L.P. 1300 I Street, N.W. Washington, DC 20005-3315			GRAY, JILL M		
			ART UNIT		PAPER NUMBER
			1774		
			DATE MAILED: 03/24/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/620,523	NOVICH ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Jill M. Gray	1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,3-40 and 42-58 is/are pending in the application.
- 4a) Of the above claim(s) 4,6-11,21-39 and 48-58 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,5,12-20,40 and 42-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 3, 2005 has been entered.

### ***Response to Amendment***

The rejection of claims 1, 18, 40 and 47 under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent Publication 1-24933 is moot in view of applicants' amendments.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1, 3, 5, 12-17, 19-20, 40, and 42-47 are rejected under 35 U.S.C. 102(a) as being anticipated by PCT Publication WO 99/44956 or PCT Publication WO 99/44958 or PCT Publication WO99/44959 or PCT Publication WO 00/21899 or PCT Publication WO 00/21900, referred to collectively as "the publications".

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The publications each teach a reinforced laminate adapted for an electronic support, the laminate comprising a matrix material, at least one fabric comprising at least one strand comprising a plurality of fibers, wherein at least a portion of the fabric has a resin compatible coating comprising a plurality of particles and which is compatible with the matrix material. In addition, the publications each teach that the fabrics can be non-degreased, as required by claims 1 and 40, and the particles and matrix materials are essentially as claimed by applicants in claims 3, 5, 12-20, and 42-47. See '956, pages 24, 25, 30, 36 and claims; '958, pages 32-36 and claims; '959, pages 27-28, 39-46 and claims; '899, pages 47-53, 60, and claims; '900, abstract, pages 3-6, 9, 13-16, 24-31, 48-52, 56-57 and claims.

Accordingly, the prior art publications anticipate the invention as claimed in present claims 1, 3, 5, 12-17, 19-20, 40, and 42-47.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 5, 12-20, 40, and 42-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagamine, 1-249333 in view of Russian Patent Publication 2072121, (Adolfovna) for reasons of record, further in view of PCT Publication WO 99/44956 (the publication) as applied above to claims 1, 3, 5, 12-20, 40 and 42-47.

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Applicants argue that Adolfovna discloses only basalt fabric sheets, which are structurally different from the glass fabric sheets of Nagamine and that because of these divergent and limited disclosures, there exists no motivation to modify the references as suggested by the examiner.

In this concern, the publication is as set forth above and further teaches on page 7 that the glass fibers of his invention can be formed from any type of fiberizable glass composition known to those skilled in the art and that basalt and mineral wool fibers are also examples of glass fibers useful in the present invention. This teaching clearly provides support for the formation of laminates and electronic supports using basalt glass fibers and/or other glass fibers, such as those taught by Nagamine with the reasonable expectation of obtaining fabric suitable for a laminate and electronic support. Accordingly, while basalt fabric sheets may be “structurally different” from other glass fabric sheets, it is the examiner’s position that this “difference” does not preclude the clear teachings of the publication of what appears to be the general level of knowledge and skill in this art at the time the invention was made, namely, that glass fibers formed from any type of fiberizable glass composition, including basalt and other known compositions such as “E-glass” and the fabrics formed therewith are known substrates in the production of laminates, prepegs, electronic supports and circuit boards. The skilled artisan would have been reasonably motivated to modify the substrate of Nagamine by adding boron nitride powder, to increase the heat resistance and improve thermophysical and dielectric properties.

***Response to Arguments***

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Applicant's arguments with respect to claims 1, 3, 5, 12-20, 40, and 42-47 have been considered but are moot in view of the new ground(s) of rejection.

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill M. Gray whose telephone number is 571-272-1524. The examiner can normally be reached on M-F 10:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jill M. Gray  
Examiner  
Art Unit 1774

jmg